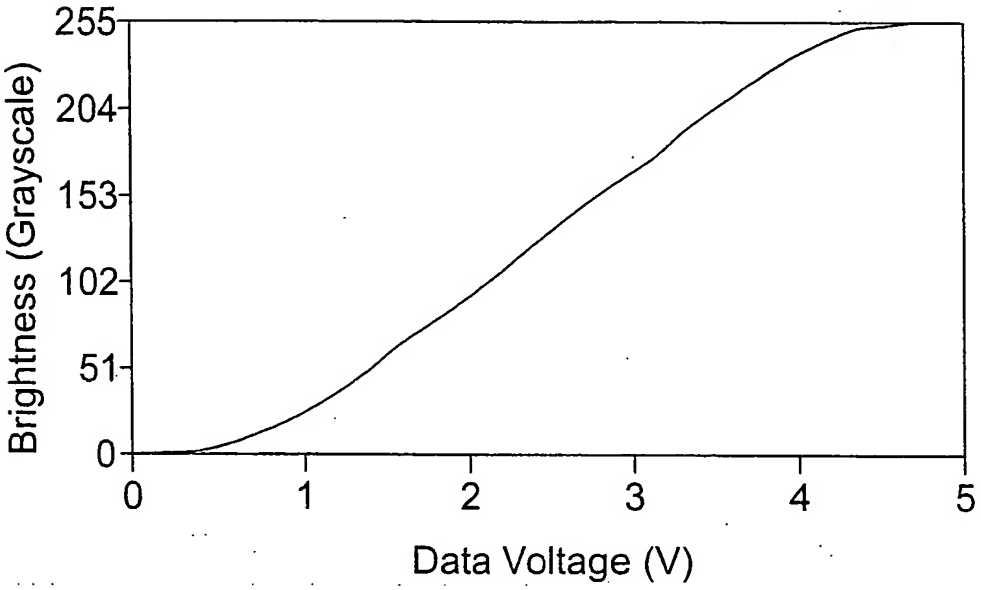
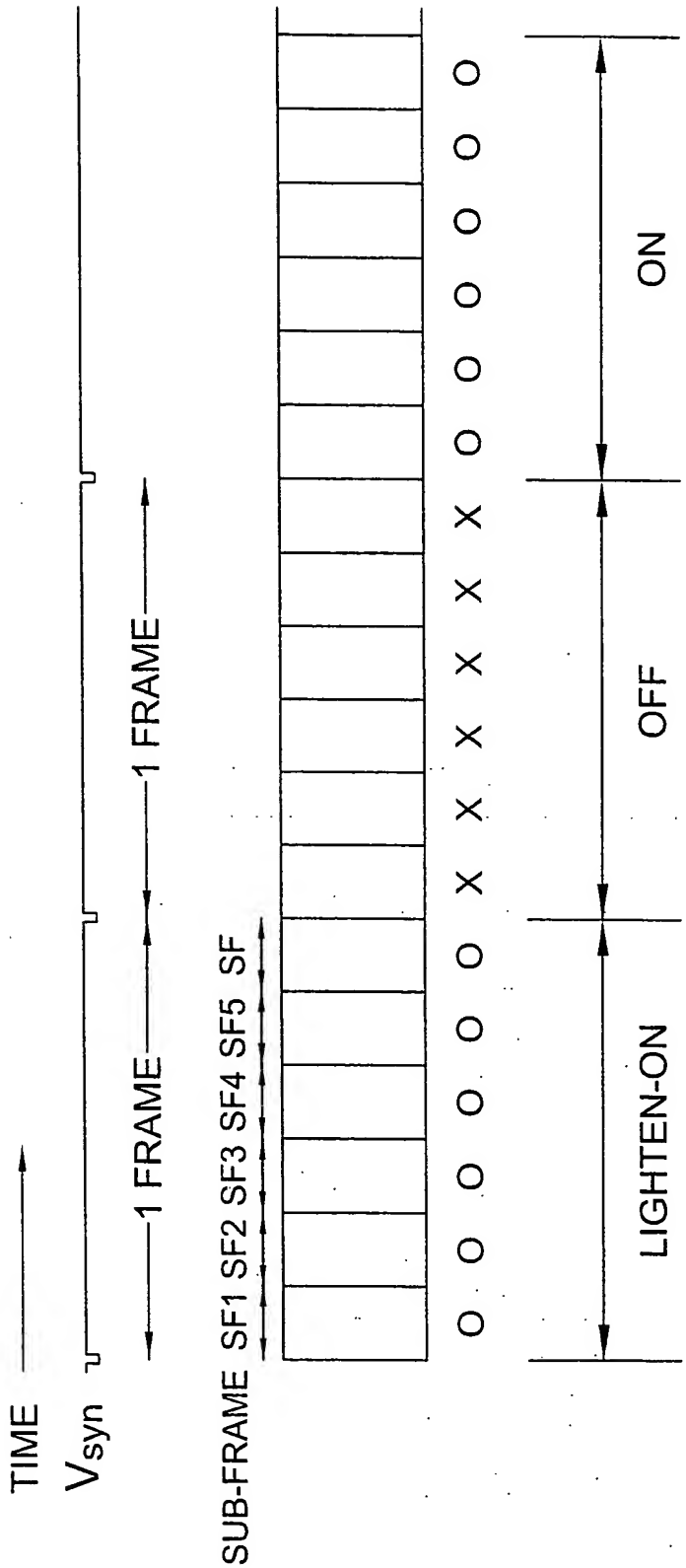


(Analog Grayscale Representation)

FIG. 1

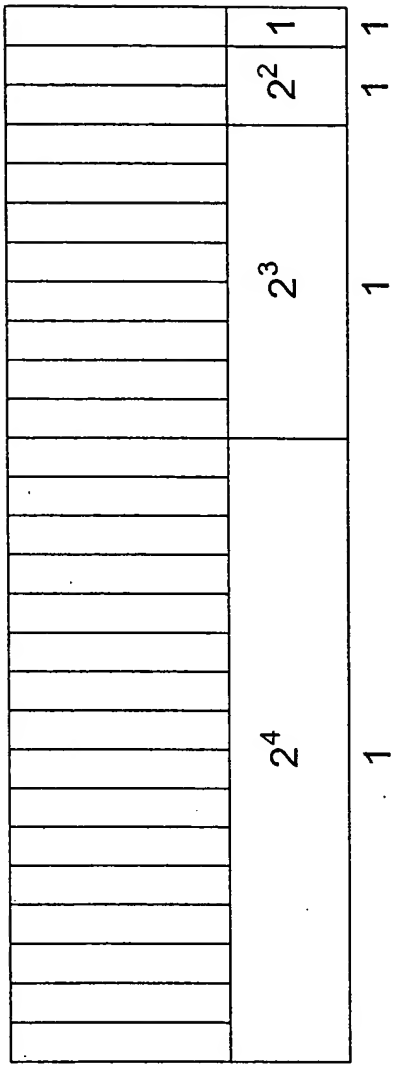
RELATED ART



Grayscale Representation

FIG. 2

RELATED ART



5-BIT Grayscale Representation

FIG. 3

RELATED ART

SUBFRAME TIME				
WEIGHT	2^3	2^2	2^1	1
ILLUMINATION	1	1/2	1/4	1/8

$1 \times 1/4 + 1/2 \times 1/4 + 1/4 \times 1/4 + 1/8 \times 1/4 = 15/32 = 50\%$

4-BIT Greyscale Representation
with Weighted Illumination

FIG. 4

RELATED ART

SUBFRAME TIME				
WEIGHT	2^3	2^2	2	1
ILLUMINATION	1	1	1	1

8/15 + 4/15 + 2/15 + 1/15 = 15/15 = 100%

1 x 1/4 + 1/2 x 1/4 + 1/4 x 1/4 + 1/8 x 1/4 = 15/32 = 50%

4-bit Grayscale Representation
with Uniform Illumination

FIG. 5

RELATED ART

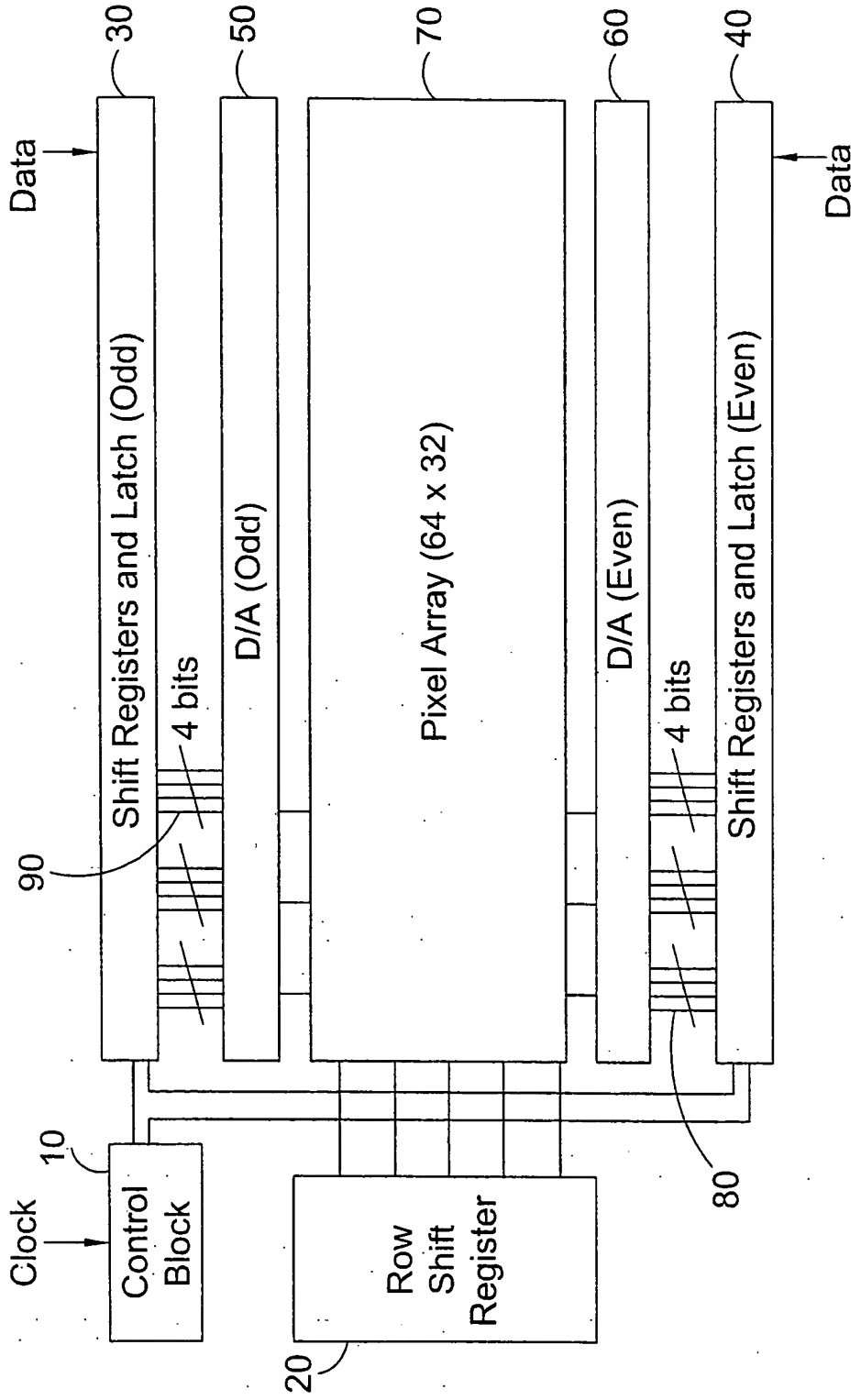
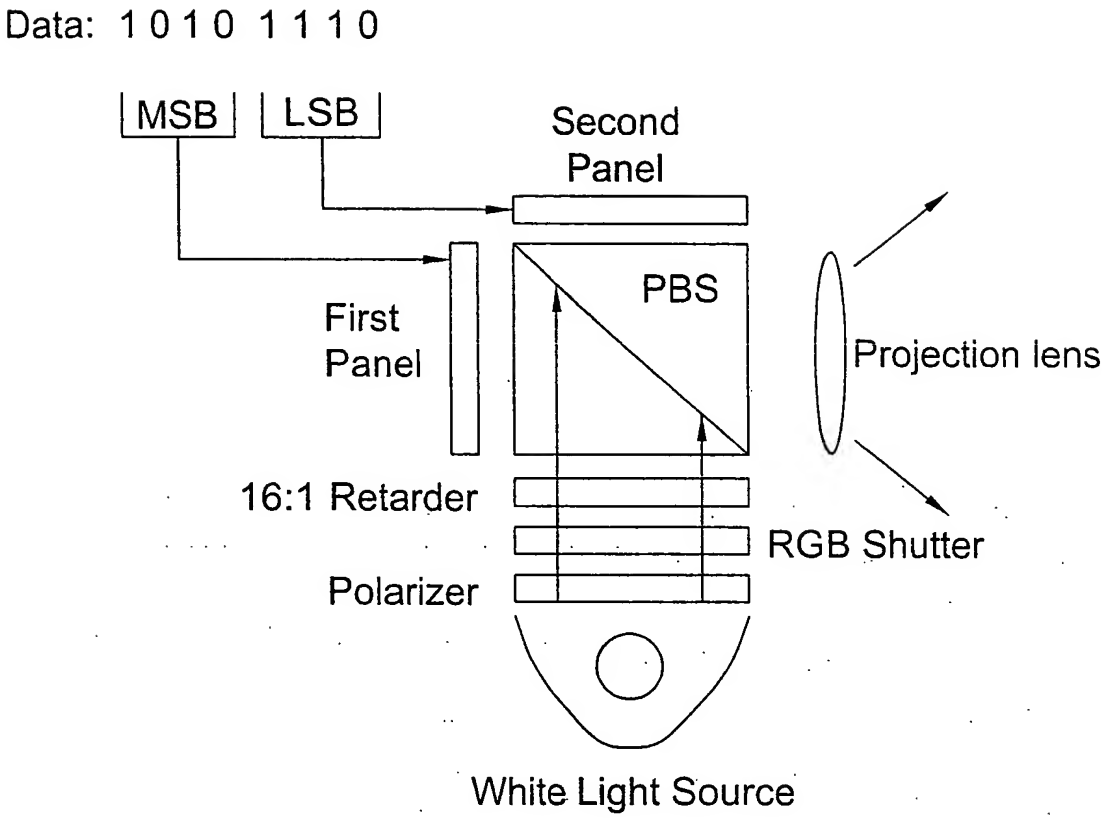


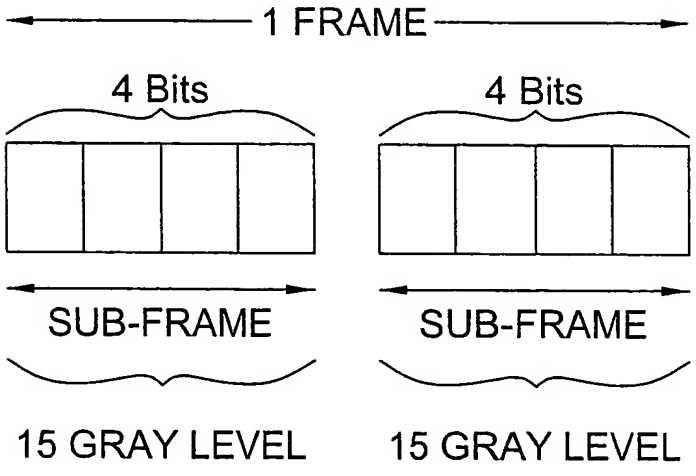
FIG. 6

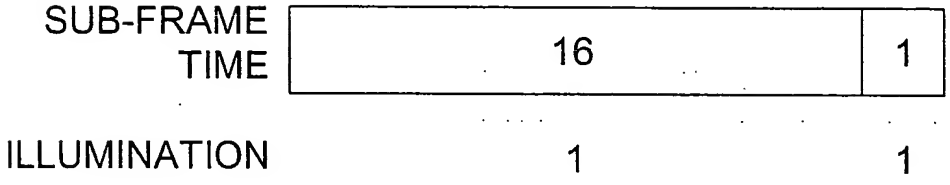
The Architecture of a Mixed Mode Driver Chip



Mixed grayscale method with two panels

FIG. 7





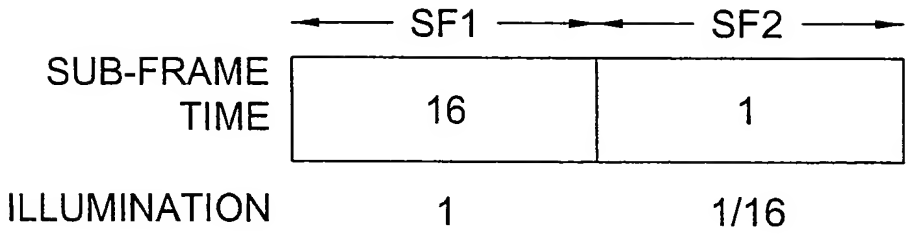
$$16/7 \times 15 + 1/17 \times 15 = 255/17$$
$$= 15$$
$$= 100\%$$

Mixed Method of Grayscale Representation

FIG. 8

UNIFORM SUB-FRAME TIME

N = 0



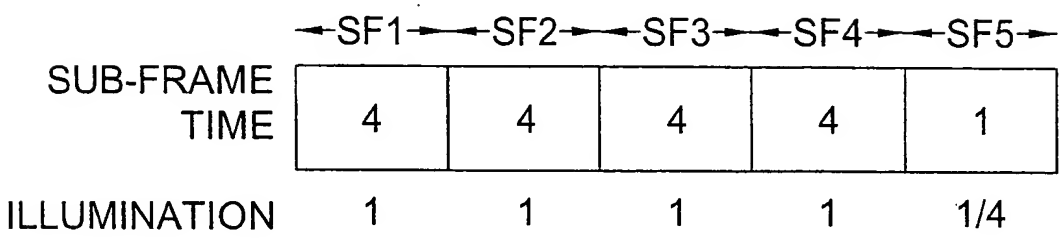
1/2 x 15 (GRAY SCALE) + 1/2 x 1/16 x 15
= 255/32 = 8 = 50%

A Mixed Greyscale Representation with 2 Sub-Frames

FIG. 9

UNIFORM SUB-FRAME TIME

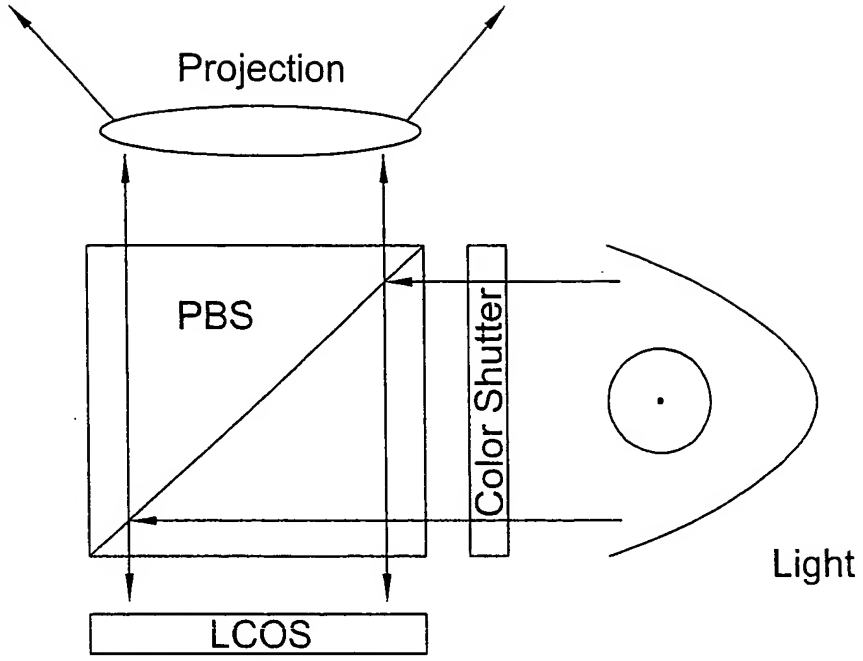
N = 2



4/5 x 15 (Grayscale) + 1/5 x 1/4 x 15
= 255/20 = 12.75 = 85%

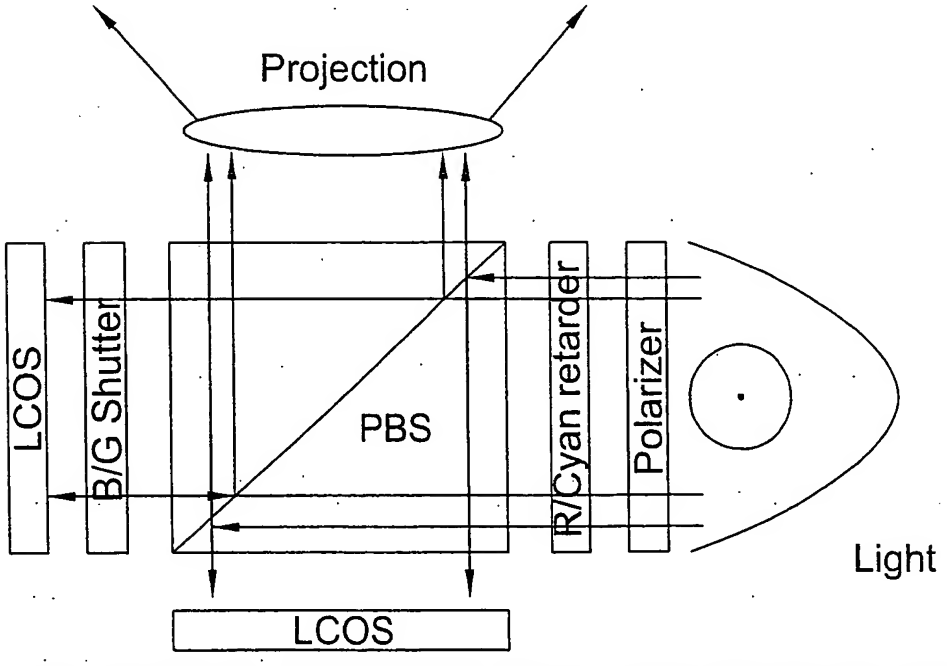
Mixed Greyscale Representation with 5 Sub-Frames

FIG. 10



1-Panel Projection Display with Field Sequential Color

FIG. 11



2-Panel Projection Display with Partial Field Sequential Color

FIG. 12